Amendments to the Drawings:

The attached sheets of substitute formal drawings includes changes to FIGS. 1-3 (sheet 1), FIGS. 7-9 (sheet 3), FIGS. 10-12 (sheet 4), FIGS. 16-18 (sheet 6) and FIGS. 20-21 (sheet 7). These sheets 1, 3-4 and 6-7 replace the original sheets including FIGS. 1-3, 7-12, 16-18 and 20-21.

Attachment: Replacement Sheets 1, 3-4 and 6-7

REMARKS

In the Office Action mailed August 23, 2004, in the above identified pending application, the examiner rejected applicants' prior-elected claims 1-3, 7-16 and 42-53 for alleged indefiniteness under 35 USC 112. In addition, these claims 1-3, 7-16 and 42-53 were rejected for alleged anticipation under 35 USC 102(b) or obviousness under 35 USC 103 in view of the cited Buettner-Janz reference (U.S. Patent 4,759,766). The examiner also objected to certain language appearing in claims 9, 16, 42, 44 and 53.

In response, applicants have amended claims 1-3, 7-9, 16, 42-44 and 53 for purposes of addressing the examiner's rejections and objections to the claims. Claims 10-15 and 45-52 are resubmitted without revision.

In addition, by this Response, applicants submit herewith revised drawings, including revised FIGS. 1-3, 7-12, 16-18 and 20-21.

As now presented, claims 1-3, 7-16 and 42-53 are respectfully resubmitted for reconsideration and allowance, particularly for the reasons noted in the following remarks.

Discussion of Claim Objections

In the Office Action, the examiner objected to certain language appearing in as-filed claims 9, 16, 42, 44 and 53. The examiner suggested proposed revisions to each of these claims.

By this response, the examiner's suggested revisions to claims 9, 16, 42, 44 and 53 have been implemented. Accordingly, the objections to the claims are now believed to be overcome.

Discussion of Drawing Revisions

In the Office Action, the examiner asserted that "[n]one of Figures 1-21 shows a bearing surface or strip having a 'generally flattened base' configuration" (Office Action, p. 3, para. 5b).

In response, applicants submit herewith revised formal drawings incorporating amendments for clarifying this feature in several of the views,

all in a manner which is clearly consistent with and supported by the original as-filed Specification.

More particularly, in FIG. 1 as shown in the revised drawings submitted herewith, the bearing insert 20 includes "generally part-cylindrical recessed bearing seats 26 and 28" (Specification, p. 11, line 6), wherein both of these recessed bearing seats 26 and 28 "have a part-cylindrical contour defined in cross sectional shape by offset radii, as shown best in FIG. 3" (p. 11, lines 23-25) with respect to the upper seat 26 to include "upwardly curving sides ... formed on radii of about 7.3 mm, but wherein the centers of these radii are spaced apart or laterally offset by a small increment (0.7 mm in the illustrative example) to provide a relatively flattened base segment interposed between the upwardly curving radiused sides" (p. 11, lines 26-30).

Accordingly, in the accompanying revised FIG. 1, the upper bearing seat 26 has been edited and shaded for better illustrating the above-quoted part-cylindrical contour defined in cross sectional shape by "offset radii" and a "flattened base segment" therebetween. In addition, one end of the lower bearing seat 28 has been shown, oriented "orthogonal" (p. 11, lines 7-8) to the upper seat 26. Revised shading has also been applied to the lower bearing strip 24 for better illustration of the "part-cylindrical and upwardly convex" shape (p. 11, line 1).

Revised shading for this lower bearing strip 24, consistent with the above-mentioned revision to FIG. 1, has also been implemented in FIG. 2 of the accompanying revised drawings.

In FIG. 3 of the accompanying revised drawings, the enlarged depiction of the upper bearing seat 26 has been edited for conformance with the foregoing quoted passages from page 11 of the as-filed Specification. In addition, the "small increment" by which the offset radii are spaced has been edited to read "0.7 mm" in FIG. 3, consistent with the as-filed Specification.

In FIGS. 7-12 of the revised drawings submitted herewith, the upper bearing surface 42 of downwardly concave shape and the lower bearing surface 44 of upwardly convex shape have been edited for more clearly showing their respective geometries in a manner consistent with the as-filed

Specification, namely, "a part-cylindrical contour defined by offset radii, similar to those shown best in FIG. 3 ... defined by curving sides to be formed as arcs of a circle, but wherein the centers of these arcs are spaced apart or laterally offset by a small increment to provide a relatively flattened rotational platform interposed between the curving radiused sides" (p. 17, lines 6-11). The specific revisions entail revised shading applied to the lower bearing strip 44 in FIGS. 7 and 9-10, and revised shading applied to the upper bearing strip 42 in FIGS. 8 and 11-12.

Similar revisions have been implemented in FIGS. 16-18 and 20-21 which illustrate the currently-elected embodiment in this application. These views show similar but orthogonally oriented elongated upper and lower "part-cylindrical" (p. 19, lines 6-7 and 11) bearing strips 72 and 74 each having "generally convex end segments separated by a centrally positioned and generally concave segment defining a concave bearing seat" (p. 19, lines 8-10 and 14-16) 74 and 76, respectively. Both of these "concave bearing seats 76, 78 ... are desirably formed on offset radii as previously shown and described relative to FIGS. 1-9, to define upwardly curving opposed sides with a relatively flattened base segment interposed therebetween" (p. 19, lines 21-25). The specific revisions entail revised shading applied to the lower bearing strip 74 in FIGS. 16 and 21, and revised shading applied to the upper bearing strip 72 in FIGS. 17-18 and 20. FIG. 18 has also been edited to show that the increment by which the offset radii are spaced is a small increment, *i.e.*, "0.7 mm" – consistent with the as-filed Specification.

The above-discussed revisions to FIGS. 1-3, 7-12, 16-18 and 20-21 thus bring the drawings into better, more consistent conformance with the as-filed Specification. By doing so, the substitute and amended formal drawings submitted herewith are believed to provide full and proper support for claims reciting the "bearing surface" or "bearing strip" defined by the offset radii separated by the "generally flattened base" configuration – thereby overcoming the Section 112 rejections based thereon.

Entry and approval of the accompanying revised formal drawings, including substitute sheets 1, 3-4 and 6-7, bearing revised FIGS. 1-3, 7-12, 16-18 and 20-21 are respectfully requested.

Discussion of Revisions to the Specification

By this Response, applicants have also implemented minor revisions to the Specification, at pages 7 and 17.

More particularly, a paragraph at page 7 of the as-filed Specification has been revised for correcting an obvious proofreading error, thereby bringing the text of that paragraph (in the Summary) into conformance with the alternative embodiment as described in the as-filed Detailed Description and as depicted in the as-filed drawing FIGS. 7-12.

In addition, a paragraph at page 17 has been edited to correct an obvious typographical error.

Entry and approval of these revisions to the Specification are also respectfully requested.

Discussion of Section 112 Rejections

As noted previously herein with respect to the accompanying revised formed drawings submitted herewith, applicants submit that the drawings are now more clearly and fully consistent with the as-filed Specification, and thereby provide full and proper support for the claimed "generally flattened base" segment recited in original claims 3, 8 and 43.

With respect to claims 1 and 42, and the use of the phrase "part-cylindrical bearing surface" therein, applicants respectfully submit that the examiner has quoted this phraseology out of context. The actual language of original claim 1 reads "***generally*** part-cylindrical bearing surface" (emphasis added). The modifier term "generally" is believed to render the phrase clear and definite under Section 112. In particular, and as used consistently throughout the Specification, the phrase "generally part-cylindrical bearing surface" described an elongated structural surface having a "generally" part-circular cross sectional shape which may be convex or concave, which may vary in diametric size along the elongated length

thereof, and which may be modified to incorporate the offset radii with intervening flattened base segment feature – all as fully and properly described in the detail in the as-filed Specification. A person skilled in the art would have no problem or difficulty in understanding the scope of the phrase "***generally*** part-cylindrical bearing surface" as used in applicants' claims.

Nevertheless, for purposes of resolving this issue, claims 1-3, 7-9, 16, 42-44 and 53 have been revised by this Response to delete use of the term "part-cylindrical". Instead, independent claims 1 and 42 now recite that "at least one" of the "bearing surfaces" (claim 1) or the "bearing seats" (claim 42) has a "generally part-circular cross sectional shape" that is further defined "by laterally spaced-apart offset radii to include a generally flattened base segment interposed between a pair of curved sides". This language is clearly consistent with the description and drawings of the as-filed application. By incorporating the "generally part-circular cross sectional shape" feature into a common claim phrase that also incorporates the "offset radii" and "flattened base segment" features (*i.e.*, the "part-circular" shape is modified to include the "offset radii" and "flattened base segment"), there can be no confusion whatsoever regarding claim definiteness under Section 112.

With respect to claim 9, applicants have edited the language in a manner which is believed to provide proper antecedent basis.

Accordingly, all rejections based upon 35 USC 112, 2d paragraph, are now believed to be overcome.

Discussion of Prior Art Rejections

As noted above, applicants' independent claims 1 and 42 now recite a pair of "bearing components" defining a corresponding pair of "bearing surfaces" (claim 1) or "bearing seats" (claim 42), wherein at least one bearing surface or seat has a "generally part-circular cross sectional shape" that is further defined or modified "by laterally spaced-apart offset radii to include a generally flattened base segment interposed between a pair of curved sides". Related dependent claims 3 and 43 require both of the associated "bearing surfaces" (claim 3) or "bearing seats" (claim 43) to have this specific modified part-circular cross sectional shape.

Applicants respectfully contend that this structure, particularly as now recited in independent claims 1 and 42, is neither anticipated nor rendered obvious by the cited art of record.

Specifically, in the Office Action, the examiner has cited the Buettner-Janz reference (U.S. Patent 4,759,766) to support claim rejections for anticipation or obviousness. However, the examiner has made no attempt to identify any bearing surface or seat in the Buettner-Janz reference exhibiting or suggesting applicants' claimed "part-circular cross sectional shape" modified or further defined by the "offset radii" with "generally flattened base segment" therebetween – as recited in claims 1 and 42. Clearly, such teaching or suggestion is not present in the Buettner-Janz reference.

Applicants' claimed structure provided numerous benefits and advantages which are not present in and thus are neither anticipated nor rendered obvious by the Buettner-Janz reference. By way of example, applicants' claimed invention accommodates a limited degree of axial rotation and translation in a manner permitting a more natural anatomic motion without significant risk of dislocation, and further wherein the claimed geometric promotes or encourages natural return motion back to a neutral position (Specification, para. beginning at p. 11, line 30).

Accordingly, applicants respectfully submit that claims 1-3, 7-16 and 42-53 as now presented distinguish clearly and patentably from any disclosure or teaching of the Buettner-Janz reference.

Applicants have reviewed the remaining references of record in this application, and respectfully submit that none incorporates any teaching or suggestion capable of overcoming the deficiencies of the Buettner-Janz reference as discussed above.

Conclusion

In conclusion, in view of the foregoing revisions to the drawings and claims, together with the accompanying remarks, applicants respectfully submit that claims 1-3, 7-16 and 42-53 as now presented are in proper form for allowance. A formal Notice of Allowance is believed to be in order and is respectfully requested.

Respectfully submitted,

KELLY LOWRY & KELLEY, LLP

Stuart O. Lowry
Registration No. 26,563

SOL:cw
6320 Canoga Avenue, Suite 1650
Woodland Hills, California 91367
(818) 347-7900